

## Quiz # 1 – Trigonometry

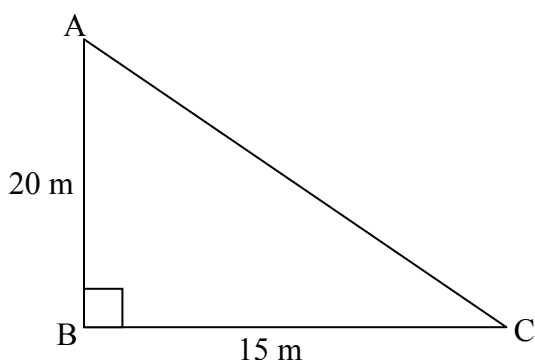
- Communication counts – 1 equal sign per line, circle final answers

Expectation	Level Achieved
TG3 - solve problems using primary trigonometric ratios of acute and obtuse angles, the sine law, and the cosine law, including problems arising from real-world applications, and describe applications of trigonometry in various occupations	

1. For the following triangle, **LABEL** the sides with respect to angle A. Then state the three primary trigonometric **ratios** for angle A (ie: Sin A, Cos A and the Tan A)

You must find the length of the hypotenuse first.

**Do NOT solve for angle A.**



2. Use your calculator to evaluate each of the following. ***Round your answers to the nearest thousandths.***

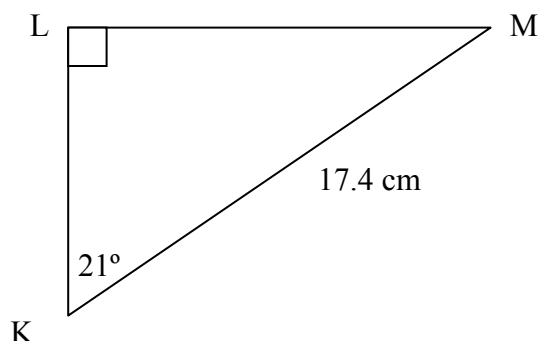
a)  $\sin 47^\circ =$  \_\_\_\_\_

b)  $\tan 218^\circ =$  \_\_\_\_\_

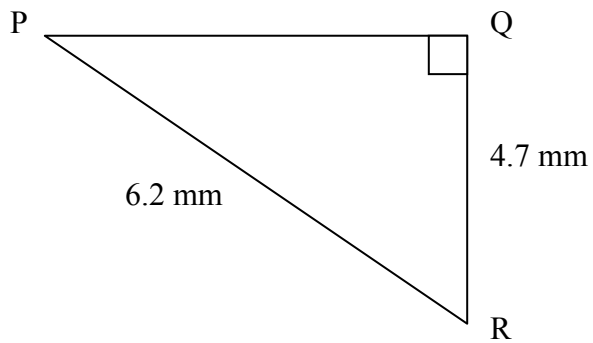
c)  $\cos 210^\circ =$  \_\_\_\_\_

d)  $\sin^{-1}(0.5) =$  \_\_\_\_\_

3. Find side “k” (round to **one decimal place**)

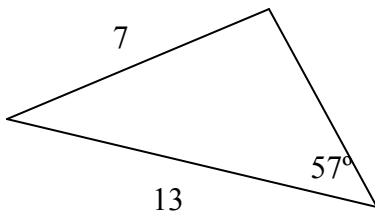


4. Find angle R to the **nearest degree**.



5. **Solve** the following triangle.

Round all side lengths to the **nearest tenth** and all angles to the **nearest degree**.



6. From the top of a cliff 278 m high, the angle of depression to a boat out at sea is  $17^\circ$ . How far is the boat

from the base of the cliff? *Include a labelled diagram with your solution.*

7. Determine the area of the triangle.  $A = \frac{1}{2}Bh$ . Accurate to the nearest *tenth of a unit*.

